BCS

Refractories 5, 1948

881. EXPERIMENTS TO DETERMINE THE THERMAL STABILITY OF A SYPHON BRICK.—A. A. Prokopyeva (*Ogneupory*, **12**, 188, 1947). Various ceramic compositions for the construction of syphon bricks were examined in order to determine their thermal stability and porosity. A composition containing kaolin was found to have the greatest stability although it had low porosity, while a composition containing "Dubrovka" clay had less stability though its porosity was the same. (2 tables.)

PROKOF'YEVA, A. G.

"Production of Dinas for the crowns of electric furnaces of the Verkh-Isetskiy Plant"

Ogneupory, No. 4, 1948

PROKOP'YEVA A.M.

OL'KHOVSKIY, I.A.; D'YACHKOVA, Z.S.; SHVARTSMAN, I.Sh.; PROKOP'YEVA, A.M.;
RUBSHTEYN, Ya.I.

Increasing the stability of stoppers for pouring electrical steel.
Ogneupory 22 no.11:520-523 '57. (MIRA 11:1)

1. Ural'skoye otdeleniye Leningradskogo instituta ogneuporov (for Ol'khovskiy, D'yachkova, Shvartsman). 2. Verkh-Isetskiy metallurgicheskiy zavod (for Prokop'yeva, Rubshteyn).

(Refractory materials)
(Smelting--Equipment and supplies)

BEREZHNAYA, A.A.; PROKOP'YEVA, A.M.; BATUYEVA, G.N.

Using Ural raw materials in manufacturing steel-pouring stoppers and nozzles. Ogneupory 25 no. 3:107-108 '60. (MIRA 13:10)

1. Verkh-Isetskiy metallurgicheskiy zavod.
(Refractory materials) (Steel--Metallurgy)

PROKOP'YEVA, A. M.

USSR/Engineering - Foundry, Equipment Dec 51

"Low-Burnt Siphon Products With 28-35% Volume Porosity in Service," A. M. Prokop'yeva, A. A. Berezhnaya, Verkh-Iset Metallurgical Plant

"Ogneupory" No 12, pp 549-552

Investigation demonstrated that siphon pieces burnt to 1,000° show good heat-resistance, and their use does not increase contamination of ingot with nonmetallic inclusions. To obtain low-burnt siphon, burning of products must be conducted at 800-1,000°.

198T21

PROKOP'YEVA, A.N.

Spectrum analysis of alundum and glass. Fiz.sbor. no.4:446-450 '58. (MIRA 12:5)
(Alundum--Spectra) (Glass--Spectra)

Prokop'yeva, A.N.

24(7) PHASE I BOOK EXPLOITATION SOV/1700

Lvov. Universitet

Materialy X Vsesoyuznogo soveshchaniya po spektroskopii, 1956. t. II: Atomnaya spektroskopiya (Materials of the 10th All-Union Conference on Spectroscopy, 1956. Vol 2: Atomic Spectroscopy) /Lvov/ Izd-vo L'vovskogo univ., 1958. 568 p. (Series: Its: Fizicheskiy sbornik, vyp. 4(9)) 3,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po spektroskopii.

Editorial Board: G.S. Landsberg, Academician, (Resp. Ed.); B.S. Neporent, Doctor of Physical and Mathematical Sciences; I.L. Fabelinskiy, Doctor of Physical and Mathematical Sciences; V.A. Fabrikant, Doctor of Physical and Mathematical Sciences; S.M. Rayskiy, Doctor of Physical and Mathematical Sciences; L.K. Klimovskaya, V.G. Koritskiy, Candidate of Technical Sciences; Candidate of Physical and Technical Sciences; V.S. Miliyanchuk Candidate of Physical and Mathematical Sciences; A.Ye. Glauberman, Doctor of Physical and Mathematical Sciences; Ed.: S.L. Gazer; Tech. Ed.: T.V. Saranyuk.

PURPOSE: This book is intended for scientists and researchers in the field of spectroscopy, as well as for technical personnel using spectrum analysis in various industries.

COVERAGE: This volume contains 177 scientific and technical studies of atomic spectrography presented at the 10th All-Union Conference on Spectroscopy in 1956. The studies were carried out by members of scientific and technical institutes and include extensive bibliographies of Soviet and other sources. The studies cover many phases of spectroscopy: spectra of rare earths, electromagnetic radiation, physicochemical methods for controlling uranium production, physics and technology of gas discharge, optics and spectroscopy, abnormal dispersion in metal vapors, spectroscopy and the combustion theory, spectrum analysis of ores and minerals, photographic methods for quantitative spectrum analysis of metals and alloys, spectral determination of the hydrogen content of metals by means of isotopes, tables, and atlases of spectral lines, spark spectrographic analysis, statistical study of variation in the parameters of calibration curves, determination of traces of metals, spectrum analysis in metallurgy, thermochemistry in metallurgy, and principles and practice of spectrochemical analysis.

Card 2/31

Materials of the 10th All-Union Conference (Cont.) SOV/1700

Borbat, A.M. Consideration of the Effect of Tertiary Components in the Analysis of Copper-base Alloys 435

Kochergina, T.Ya., and V.A. Zaytseva. Spectral Determination of Cu, Sn, Sb, Bi, and Ag in Lead Antimonide 438

Nikiforova, Ye.F. Spectrographic Determination of the Relationship Between Phosphorus and Arsenic Distribution in Steel 439

Peyzner, R.L. Experience in Spectrum Analysis Using Fixed Curves in the Production of Normal Electrolytic Corundum 441

Prokop'yeva, A.N. Spectrum Analysis of Alundum and Glass 446

Kustanovich, I.M. Spectrograph for the Analysis of Molten Metal and Slag 451

Kustanovich, I.M. Simple Photoelectric Units for Emission Spectrum Analysis Utilizing the Total Intensity of Many Lines 452

Card 25/31

OZHIGANOV, V.S.; PROKOP'YEVA, A.M.; IVANOVA, Z.P.

Manufacture and service of grog-carbon steel-pouring stoppers.
Ogneupory 27 no.2:63-66 '62. (MIRA 15:3)

1. Verkh-Isetskiy metallurgicheskiy zavod.
(Open-hearth furnaces--Equipment and supplies)

MINKIN, Ye.V., aspirant; PISKAREVA, L.V., studentka; PROKOP'YEVA, F.A.;
[illegible], L.Kh.

Effect of the preliminary treatment of collagen on its dissolving at different pH values. Report no.2. Nauch. trudy MTILP no.27: 39-43 '63.
(MIRA 17:11)

1. Kafedra tekhnologii kozhi i mekha Moskovskogo tekhnologicheskogo instituta legkoy promyshlennosti.

BABENKO, S.A.; Prinimali uchastiye: PLESHKOVA, A.F.; PROKOP'YEVA, F.G.; CHERVENCHUK, G.A.

Flotation of ilminite from sands containing humic substances. Izv. SO AN SSSR no.10 Ser. tekh. nauk no.3:104-108 '63. (MIRA 17:11)

1. Tomskiy politekhnicheskiy institut.

PROKOP'YEVA, G.M.

Serum protein and protein fractions in children with chronic nonspecific pneumonia. Trudy Izhev.gos.med.inst. 21:151-156 '64. (MIRA 19:1)

1. Kafedra detskikh bolezney Izhevskogo meditsinskogo instituta (zav. - prof.A.I.Perevoshchikova) i kafedra propedevtiki detskikh bolezney 2-go Moskovskogo meditsinskogo instituta (zav. - prof.V.A.Vlasov).

PROKOP'YEVA, G.M.

Protein preparation "Kazgol'" in the feeding of children. Vop. okh. mat. i det. 5:9-12 S-O '60. (MIRA 13:10)

1. Iz kliniki detskikh bolezney Izhevskogo meditsinskogo instituta (zav. kafedroy detskikh bolezney - prof. A.I. Perevoshchikova).
(CHILDREN—NUTRITION) (PROTEINS)

SOV/137-59-3-7265

Translation from: Referativnyy zhurnal. Metallurgiya, 1959, Nr 3, p 329 (USSR)

AUTHORS: Belau, R. N., Prokopyeva, K. A.

TITLE: Determination of Hydrogen, Oxygen, and Nitrogen in Steel (Opredeleniye vodoroda, kisloroda i azota v stali)

PERIODICAL: Tekhn.-ekon. byul. Sovnarkhoz Kranoyarskogo ekon. adm. r-na, 1958, Nr 4-5, pp 44-46

ABSTRACT: The authors describe the method used at the "Sibelektrostal'" plant for determining H_2, O_2, and N_2 by melting in a vacuum. The metal is melted in a graphite crucible at 1600-1700°C in a vacuum (10^{-4} mm Hg). The evolving gases enter an oxidizing furnace with a 350° temperature. In the analytical section of the apparatus the presence of H_2, O_2 and N_2 is determined by measuring the volumes of the gases evolved with MacLeod manometers, after they have been fractionally frozen out with liquid O_2 at -183°. Time required for the determination of the three components is 35-40 min. The layout of the apparatus and of some specific parts and a detailed working procedure are adduced. The apparatus is used for routine analyses and for research work.

N.G.

Card 1/1

PROKOP'YEVA, K. A. and NAUMOVA, A. S.

Physico-Chemical Analysis of the System Aniline-Nitrobenzene, page 788, Sbornik statey po obshchey khimii (Collection of Papers on General Chemistry), Vol II, Moscow-Leningrad, 1953, pages 1680-1686.

Tomsk Poltechnic Inst

1. BOGDANOVA, A. V.; VARTANYAN, A. B.; PROKOP'YEVA, L. N.

2. USSR (600)

4. Cotton Spinning

7. Using cotton waste in spinning.
Tekst. prom 12 no. 10, 1952

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

PROKOP'YEVA, M.F.; BUKINA, V.K.

Separate quantitative determination of gaseous chlorine, nitrosyl chloride, and hydrogen chloride by gas-liquid chromatography. Uzb. khim. zhur. 7 no.6:30-35 '63. (MIRA 17:2)

1. Institut khimii AN UzSSR.

BUKINA, V.K.; PROKOP'YEVA, M.F.; YATRUDAKIS, S.E.

Quantitative determination of nitrosyl chloride, chlorine, and hydrogen chloride in gas mixtures. Uzb. khim. zhur. no.6:45-49 '60. (MIRA 14:1)

1. Institut khimii AN UzSSR.
(Nitrosyl chloride) (Chlorine—Analysis)
(Hydrochloric acid)

KIVERIN, M.D.; KALINKINA, G.M.; PROKOP'YEVA, M.I.

Method of determination of sugar in skin. Lab.delo 7 no.9:12-15 S '61. (MIRA 14:10)

1. Kafedra biologicheskoy i organicheskoy khimii (zav. - dotsent M.D.Kiverin) Arkhangel'skogo meditsinskogo instituta.
(BLOOD SUGAR) (SKIN)

PROKOP'YEVA, M.S.; PILYUSHENOK, S.V.; NIKOLAYEVA, R.I.; CHECHENKOVA, M.V.; MIKHAYLOVA, A.A.; STRELKOVA, A.V.; LOPUKHA, N.Ye; KOZLOV, F.N., red.; VOINOV, K.F., red.; BABESHKINA, N., tekhn. red.

[Economy of Pskov Province; statistical collection] Narodnoe khoziaistvo Pskovskoi oblasti; statisticheskii sbornik. Leningrad, Gosstatizdat, 1960. 175 p. (MIRA 14:6)

1. Pskov (Province) Statisticheskoye upravleniye. 2. Rabotniki Statisticheskogo upravleniya Pskovskoy oblasti (for all except Kozlov, Voinov, Babeshkina). 3. Nachal'nik Statisticheskogo upravleniya Pskovskoy oblasti (for Kozlov). 4. Zamestitel' nachal'nika Statisticheskogo upravleniya Pskovskoy oblasti (for Voinov)
(Pskov Province—Statistics)

PROKOP'YEVA, V.I. (Chelyabinsk)

Conservative method for treating tuberculous mastitis. Klin.med. 34 no.10:66-67 0 '56. (MIRA 10:1)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - prof. I.D.Korabel'nikov) Chelyabinskogo meditsinskogo instituta (dir. - professor G.D.Obraztsov) na baze Bol'nitsy ChTZ (glavnyy vrach O.N.Tukholko)
(BREAST--TUBERCULOSIS)

PROKOP'YEVA, Ye.M.

Tolerance of animals to hypothermia at the early stages of postembryonic ontogeny. Pat. fiziol. i eksp. terap. 8 no.5:81-82 S-O '64. (MIRA 18:12)

1. Kafedra patologicheskoy fiziologii (zav. - prof. I.B. Mazhbich) Omskogo meditsinskogo instituta. Submitted March 9, 1963.

PROKOP'YEVA, Ye. M.

"Supercooling Endurance of Young Warm-Blooded Animals." Cand Med Sci, Omsk State Medical Inst, Omsk, 1953. (RZhBiol, No 8, Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)

SO: Sum. No. 556, 24 Jun 1955

PROKOP'YEVA, Z.

Our readers' conferences. Mashinostroitel' no.4:45-46 Ap '62.
(MIRA 15:5)

(Engineering--Periodicals)

KOROTKOV, Sergey Ksenofontovich, Geroy Sotsialisticheskogo Trudu; PROKOP'YEVICH, Izheyev Mikhail; IGNAT'YEV, V.I., red.; IVANOVA, L.I., tekhn. red.

[Hymn to corn] Gimn kukuruze. Cheboksary, Chuvashskoe gos. izd-vo, 1961. 39 p. (MIRA 14:7)

1. Deputat Verkhovnogo Soveta SSSR, Predsedatel' kolkhoza imeni Lenina Vurnarskogo rayona (for Korotkov)

(Corn (Maize))

VETOSHCHUK, V.I., dotsent; PROKOPYSHIN, M.V.

Methodology for one-stage angiography of the lower extremities.
Vest. rent. i rad. 40 no.4:60-61 Jl-Ag '65. (MIRA 18:9)

1. Kafedra rentgenologii i radiologii (zav.- dotsent V.I. Vetoshchuk) i kafedra gospital'noy khirurgii (zav.- prof. S.A. Verkhratskiy) Ivano-Frankovskogo meditsinskogo instituta.

PROKOPYSHKO, A.Z.

ZHOLNEROVICH, A.M., kandidat sel'skhohozyaystvennykh nauk; PROKOPYSHKO, A.Z.; GATAL'SKIY, G.A.; YEVDOKIMOVA, A.Ye.

Basic methods of the primary cultivation of peat-swamp soils in the White Russian S.S.R. Izv.AN BSSR. no.5:41-56 S-O '53.
(Peat soils) (MLRA 9:1)

PROKOPYUK, A.; MIROSHNIKOV, I.; KOCHUKOVA, N.

Work practices of the leading crew of the Ussuri Feed Mill under the Maritime Administration of Cereal Products. Muk.-elev.prom. 26 no.7:5-7 Jl '60. (MIRA 13:8)

1. Direktor Ussuriyskogo kombikormovogo zavoda (for Prokopyuk). 2. Glavnyy inzhener Ussuriyskogo kombikormovogo zavoda (for Miroshnikov). 3. Starshiy master Ussuriyskogo kombikormovogo zavoda (for Kochukova).

(Ussuri--Feed mills)

Prokopyuk, A.

PROKOPYUK, A.; MIROSHNIKOV, I.; LOBAS, B.

We will celebrate the fortieth anniversary of the Revolution with appropriate achievements. Muk.-elev.prom. 23 no.7:18-19 Jl '57. (MLRA 10:9)

1. Voroshilovskiy kombikormovyy zavod Primorskogo kraya.
(Grain milling)

S/2744/64/000/007/0083/0094

ACCESSION NR: AT4043275

AUTHOR: Vol'f, M. B., Grudnikov, I. B., Prokopyuk, L. G., Plan, M. A., Tukov, G.V.

TITLE: Removal of carbon dioxide and sulfur compounds from ethylene by means of synthetic zeolites

SOURCE: Ufa. Bashkirskiy nauchno-issledovatel'skiy institut po pererabotke nefti. Trudy*, no. 7, 1964. Sernisty*ye nefti i produkty* ikh pererabotki (Sour crude oil and products of refining), 83-94

TOPIC TAGS: zeolite, carbon dioxide, ethylene, sulfur synthetic zeolite, adsorption column, acetylene, ethylene purification, molecular sieve

ABSTRACT: An investigation of different molecular sieves made at the Gor'kovskaya eksperimental'naya baza (Gor'kiy Experimental Plant) of the VNII NP for the removal of carbon dioxide from ethylene by adsorption showed that the most effective zeolite samples were of the type CaA, NaA being less effective and CaX and NaX being unsuitable for the purification. Using CaA zeolite, optimal results were obtained at a volumetric rate of 1200-9000 liter/liter per hour (linear rate of 0.008-0.05 m/sec. A decrease in temperature from 36 to 3C improved the adsorption properties of CaA zeolite with respect to carbon dioxide. Adsorption on zeolite CaA in one cycle at 22 atm. and 3C, at a rate of

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ACCESSION NR: AT4043275

1200-9000 hr.$^{-1}$, decreased the carbon dioxide content from 0.02-0.04% to 0.001%. In order to decrease the amount of sulfur compounds from 1-8 to 0.5 mg/mm^3, up to 30,000 liters of ethylene can be processed with 1 liter of zeolite in one cycle of adsorption. The operation of the adsorption column is shown schematically. The influence of the particle size of the zeolite on the degree of purification was also investigated. Comparison of the results of adsorption with ordinary granules and with adsorbents ground to 1-2 mm showed that the ground zeolite is much more effective than the granulated one. The sulfur content of ethylene before and after purification with zeolites is shown in a table. The desorption of the gases adsorbed on zeolites, including ethylene, can be accomplished by bubbling through a methane-hydrogen mixture at atmospheric pressure and 240-300C, using a mixture of 600-800 liters per liter of zeolite. After desorption, the molecular sieves regain their adsorptive properties. The use of zeolites for removing impurities from ethylene makes it possible to reject the use of aklaline purification completely and to obtain ethylene of a higher degree of purity. The adsorption of acetylene from ethylene before its hydrogenation does not give a sufficiently high degree of separation; hence it cannot be recommended for industrial use. Orig. art. has: 8 figures, 4 tables and 1 chemical equation.

ACCESSION NR: AT4043275

ASSOCIATION: Bashkirskiy nauchno-issledovatel'skiy institut po pererabotke nefti, Ufa (Bashkir Scientific Research Institute for Petroleum Refining)

SUBMITTED: 00

ENCL: 00

SUB CODE: OC, FP

NO REF SOV: 009

OTHER: 006

Card 3/3

L 52571-65 EWT(m)/EPF(c)/T Pr-4 WE

ACCESSION NR: AP5009897 UR/0065/65/000/004/0015/0020

AUTHORS: Vol'f, M. B.; Grudnikov, I. B.; Prokopyuk, L. G.

26
25
B

TITLE: Application of molecular filters to the purification of cycled hydrogen in catalytic reforming

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 4, 1965, 15-20

TOPIC TAGS: filtration, molecular absorption, rare earth, gas absorption, gas adsorption, adsorption dehydration

ABSTRACT: The use of artificial zeolites for removing hydrogen sulfide and water from hydrogen was investigated on gas with the volume percentage composition

H_2	84,0—89,0
CH_4	5,0—6,5
C_2H_6	3,0—5,0
C_3H_8	1,5—3,0
ΣC_4	0,4—1,1
ΣC_5	0,0—0,2
H_2S	0,005—0,020
H_2O	0,5—0,7 g/м³

The work was performed to find a procedure more effective than the one currently

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L 52571-65

ACCESSION NR: AP5009897

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used. The method described by A. N. Blazhennova, A. A. Il'inskaya, and F. M. Rapoport (Analiz gazov v khimicheskoy promyshlennosti. Goskhimizdat, 1954) was used in determining the degree of purification attained. Zeolites of NaA, CaA, NaX, and CaX types were tested at the gas feed of 22 lit/min. Their adsorptive ability toward H_2S at 15 and 28C is tabulated. Various gas flow rates were also investigated. The influence of water content on the removal of H_2S is shown in Fig. 1 on the Enclosure. The process of desorption at temperatures of 200-400C and at flow rates of the desorbing gas of 240-1200 lit/lit/hr is described. It is noted that the decrease in the adsorption temperature (from 35 to 5C) and the decrease of the H_2S and water content in the original gas (from 0.050 to 0.005 vol., and 0.70 to 0.00 g/m^3) considerably improved the purification results, while the variation in the volumetric and linear flow rates showed no effect. The influence of temperature on hydrogen purification and zeolite capacity for H_2S adsorption is shown in Fig. 2 on the Enclosure. The ability of zeolites to remove H_2S was improved with a decrease in the adsorption temperature and an increase in the H_2S content of the original gas. In one adsorption cycle at a pressure of 30 atm, 1 m^3 of zeolite dried and purified 100 000 and 60 000 m^3 of cycled hydrogen at 15 and 30C respectively. An increase in temperature and in the

the process of desorption. An 8-hr desorption restored the adsorptive

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L 52571-65

ACCESSION NR: AP5009897

properties of zeolites from 65 to 90%. Excess hydrogen separated continuously from the circulation system during this process may be used as blow gas for desorption, while the desorption-gases may be used for dehydration. Orig. art.

L 52571-65

ACCESSION NR: AP5009897

ENCLOSURE: 01

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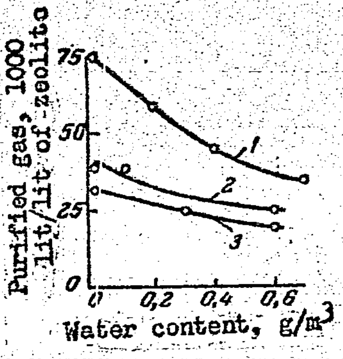

Fig. 1. The influence of water content in the cycled hydrogen on the adsorption of hydrogen sulfide. Zeolite [illegible] temperature 24C. H_2S content in the original gas

(% by vol): 1- 0.005; 2- 0.015; 3- 0.045

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L 52571-65

ACCESSION NR: AP5009897 ENCLOSURE: 02

0

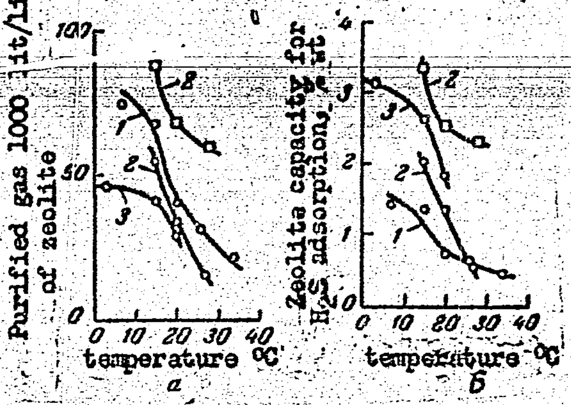

Fig. 2. Relation of the quantity of purified cycled hydrogen and the zeolite ability for H_2S adsorption to temperature. Original gas contained: water 0.5

0.8 g/m³; H_2S (% by vol.): 1- 0.008; 2- 0.015;
3- 0.025

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Card 5/5

VOL'F, M.B.; ALEKSEYEVA, R.V.; PROKOPYUK, L.G.

Using molecular sieves to increase the octane number of gasolines. Trudy BashNII NP no.6:79-94 '63. (MIRA 17:5)

VOL'F, M.B.; GRUDNIKOV, I.B.; PROKOPYUK, L.G.; PLAN, M.A.; TUKOV, G.V.

Use of molecular sieves for an advanced stage of ethylene refining.
Khim.i tekh.topl.i masel 8 no.8:23-30 Ag '63. (MIRA 16:9)

1. Bashkirskiy neftyanoy nauchno-issledovatel'skiy institut.
(Ethylene) (Zeolites)

L 17527-63 EWP(j)/EPF(c)/EWT(m)/BDS ASD Pc-4/Pr-4 RM/WW/AB

ACCESSION NR: AP3004532 S/0065/63/000/008/0023/0030

AUTHORS: Vol'f, M. B.; Grudnikov, I. B.; Prokopyuk, L. G.; Plan, M. A.; Tukov, G. V.

TITLE: Utilization of molecular sieves for fine purification of ethylene

68

SOURCE: Khimiya i tekhnologiya topliv i masel, no. 8, 1963, 23-30.

TOPIC TAGS: ethylene, molecular sieve, ethylene purification, zeolite, CaA, NaA

ABSTRACT: This investigation was carried out to learn the conditions under which zeolites can be used for a fine purification of ethylene. The investigation showed that the most effective zeolites are CaA, less effective are NaA. Ones which are not suitable for the purification method are CaX and NaX. Desorption of gases, including ethylene, from the zeolite is accomplished by blowing a methane-hydrogen mixture through it at atmospheric pressure at 240-300C in an amount of 600-800 l/l of zeolite. The obtained data can be applied in the development of a process for a fine purification of ethylene by means of molecular sieves. Using zeolite CaA at a pressure of 22 atm. and 3C with a volumetric rate of 1200 to 9000 l/l hr, the CO_2 content in 12,000 liters of ethylene/l of zeolite

Card 1/2

L 17527-63

ACCESSION NR: AP3004532

O

is lowered from 0.02-0.04 to 0.001% by volume. The sulfur content is lowered from 1-8 mg to 0.5 mg of sulfur for 1 m^3 of ethylene. Periodical regeneration of zeolite at 400C may be accomplished with N_2 or some other inert gas mixed with O_2. The use of zeolites for the purification of ethylene will completely eliminate its purification with alkali and it will be possible to obtain ethylene of higher purity. Orig. art. has: 2 tables and 5 figures.

ASSOCIATION: BashNII

SUBMITTED: 00 DATE ACQ: 27Aug63 ENCL: 00

SUB CODE: PH, CH NO REF SOV: 008 OTHER: 002

Card 2/2

PROKOPYUK, N., Geroy Sovetskogo Soyuza

On the path of trials. Radio no.3:4-5 Mr '65. (MIRA 18:6)

BRODIN M.L.; KRAVCHENKO, V.I.; PROKHORCHUK, N.P., SOSKIN, M.S.

Spectral composition of the generation from neodymium glass in a dispersion resonator. Pis'. v red. Zhur. eksper. i teoret. fiz. 2 no. 11:519-521 D '65.

1. Institut fiziki AN UkrSSR, Kiyev. Submitted October 21, 1965.

BROUDE, V. A., MASHKEVICH, V. S., PRIKHOT'KO, A. F., PROKOPYUK, N. F., SOSKIN, M.S.

"Induced radiation in molecular crystals."

A four-level scheme for a quantum generator was discussed. It was shown that optical properties of molecular crystals provide a basis for the realization of a quantum generator.

The report presented at the 11th Conference on Luminescence (Molecular luminescence and luminescence analysis) Minsk, 10-15 Sept. 1962.

44158

9,2576 (also 4205)

S/181/62/004/010/055/063
B102/B104

AUTHORS: Broude, V. L., Mashkevich, V. S., Prikhot'ko, A. F., Prokopyuk, N. F. and Soskin, M. S.

TITLE: Possibility of obtaining induced radiation in systems with electron vibrational levels

PERIODICAL: Fizika tverdogo tela, v. 4, no. 10, 1962, 2976-2978

X

TEXT: A possibility of obtaining negative temperatures and induced radiation in a four-level scheme of molecular systems is discussed. The scheme (Figure) consists of the ground state (1), a vibrational level of the electron ground state (2), the first excited electron level (3), and the totality of all higher levels (4). 1-4 is a transition due to light-quantum absorption, 4-3 a radiationless transition, 3-2 the transition used for obtaining the induced radiation and 2-1 again a radiationless transition. The lifetimes of the radiative transitions are $\tau_r \sim 10^{-7} - 10^{-9}$sec, those of the radiationless transitions are $\tau_n \ll \tau_r'$. τ_n has to be small for obtaining the induced radiation. Generation of

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S/181/62/004/010/055/063
B102/B104

Possibility of obtaining induced ...

coherent induced radiation begins if $n_3 - n_2 \gtrsim 8\pi^2 c\tilde{\nu}^2 \Delta\tilde{\nu}\, \tau_0 \frac{1-R}{l}$ where n_2, n_3 are the mean numbers of molecules in state 2 or 3 per unit volume, $\tilde{\nu}$ is the wave number of the 3-2 transition, $\Delta\tilde{\nu}$ the halfwidth, R the reflection coefficient of the resonator mirror, l is the length of the sample, and τ_0 is the lifetime of state 3 with respect to the 3-2 transition. $n_3 \simeq 4\tau K\eta N$, where τ is the lifetime of state 3 with respect to all other transitions to lower states, K is the mean absorption coefficient on the region of the 1-4 transition, η is the number of states 3 produced from one state 4, and N is the number of photons of the optical excitation 1-4 per unit of time and per unit of surface area. Numerical estimates for the anthracene molecule are presented. For $K = 2\ \text{cm}^{-1}$, $\eta = 1$, $\tau = 3 \cdot 10^{-8}$ sec and $\tau_0 = 10^{-7}$ sec one obtains $N = 4 \cdot 10^{21}\ \text{cm}^{-2}\text{sec}^{-1}$ which can be realized by means of an ИФК-2000 (IFK-2000) pulsed lamp. If besides $\tau_n \ll \tau_r$, $n_2 \ll n_3$, N will depend on τ_0/τ, not on τ alone. This makes it possible to draw conclusions as to the most effective form of luminescence spectrum to obtain induced radiation. A system of layers of dielectric

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coatings with a certain $R(\omega)$ dependence allows of annihilating all induced radiation frequencies other than a chosen one, where R has a peak. Thus such a system can be used as an "antifilter". There is 1 figure. The most important English-language references are: W. Kaiser et al. Phys. Rev., 123, 765, 1961; E. G. Brock et al. J. Chem. Phys. 35, 759, 1961.

ASSOCIATION: Institut fiziki AN USSR, Kiyev (Institute of Physics AS UkrSSR, Kiyev)

SUBMITTED: June 6, 1962

Card 3/4
3

L 11055-66 FBD/EWT(l)/EWP(e)/EWT(m)/EEC(k)-2/T/EWP(k)/EWP(b)/EWA(m)-2/EWA(h) SCTB/ IJP(c) WG/WH

ACC NR: AP6002468 SOURCE CODE: UR/0386/65/002/011/0519/0521

AUTHOR: Broude, V. L.;44 Kravchenko, V. I.;44 Prokopyuk, N. F.;44 Soskin, M. S.44 · 12/B

ORG: Physics Institute, Academy of Sciences UkrSSR,44 Kiev (Institut fiziki Akademii nauk UkrSSR)

TITLE: Spectral composition of radiation from neodymium glass 15,44 in a laser 25,44 cavity

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 11, 1965, 519-521, and insert between p. 520 and 521

TOPIC TAGS: laser, laser optics, solid state laser, laser resonator

ABSTRACT: Laser action is reported on various lines throughout a spectral range five times as broad as the range of stimulated emission usually observed from a Nd^{3+} doped glass laser (2% Nd^{3+}). A special "dispersion" resonator developed by the author (Author certificate 164325, 1 March 1963; IN: Byulletin' izobreteniy i tovarnykh znakov, no. 15, 1963; see also Adademiya nauk SSSR, Doklady, v. 163, no. 6, 1965, p. 1342-1343) in which a prism is placed between the laser rod and the adjustable end mirror was used. In the Fabry-Perot setup, several lines appeared near 9440 cm^{-1} at the threshold for laser action. The number of lines increased with the pump power and at the peak pump power (6 times the threshold) the lines spanned the region between 9390 and 9470 cm^{-1} at intervals betwen 3 and 5 cm^{-1}. In the "dispersion" mode of operation, changes in the inclination of the mirror resulted in changes in the

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frequency of emission. At different inclinations of the mirror, laser action was attained on different lines in the range between 9090 and 9540 cm^{-1}. The laser used had an inhomogeneously broadened luminescence line at 1.06 μ. A glass prism with an angular dispersion of 1 sec/Å was utilized in the experiments. Laser action throughout such a wide range was attributed to the fact that the "dispersion" mode of operation is responsible for selective losses, making generation possible on lines which are not excited in the Fabry-Perot mode of operation. Orig. art. has: 2 figures. [CS]

SUB CODE: 20 / SUBM DATE: 21Oct65/ ORIG REF: 002/ OTH REF: 002/ ATD PRESS: 4171

Card 2/2

VOL'F, M.B.; GRUDNIKOV, I.B.; PROKOPYUK, L.G.; PLAN, M.A.; TUKOV, G.V.

Removal of carbon dioxide impurities and sulfur compounds from ethylene using synthetic zeolites. Trudy BashNII NP no.7:83-94 '64. (MIRA 17:9)

[illegible]

ACC NR: AP6023621 SOURCE CODE: UR/0318/66/000/004/0003/0006

AUTHOR: Bugay, Yo. A.; Prokopyuk, S. G.

ORG: Ufa Petroleum Refinery of the Order of Lenin (Ufimskiy ordena Lenina neftepererabatyvayushchiy zavod)

TITLE: Operation of catalytic cracking unit under conditions of destructive sulfur removal from the diesel fuel fraction

SOURCE: Neftepererabotka i neftekhimiya, no. 4, 1966, 3-6

TOPIC TAGS: catalytic cracking, desulfurization, diesel fuel

ABSTRACT: After a half year's operation of the catalytic cracking unit under sulfur removal conditions at the Ufa petroleum refinery, some of the stages of the unit were partly modified in order to improve the technical and economic indicators and raise its output. The process of sulfur removal occurs at a lower temperature and a higher volume velocity than the process of catalytic cracking. In the sulfur removal process use is made of diesel distillates containing a considerable amount of heavy gas oil fractions boiling above 350°. By making the fractional composition of the distillate heavier, one increases the efficiency of the process, since the light cracking of tail fractions occurring simultaneously with the sulfur removal is associated with the formation of an additional quantity of target products which offset the losses of the diesel fraction taking place during the destructive sulfur removal from the main por-

Card 1/2 UDC: 665.644.2.05:665.658.26

L 45677-66

ACC NR: AP6023621

tion of the stock. Distillates of secondary origin (in addition to the straight-run diesel fractions) are also used as stock in the sulfur removal process. The distribution of sulfur among the fractions of the stock and purified distillate obtained from the catalytic cracking unit is given. The wet gas and gasoline obtained during the purification process are equivalent in quality to the same products of catalytic cracking. It is concluded that practically all the indicators of the process were improved by the modifications introduced. Orig. art. has: 2 figures and 5 tables.

SUB CODE: 11/ SUBM DATE: none

PROKORNY, A.

Role of research institutes in the realiation of results of research and creative technological work, p. 88, ZA SOCIALISTICKOU VEDU A TECHNIKU (Pripravny vybor vedeckych technickch spolecnosti pri eskoslovenske akademii ved) Praha, Vol. 5, No. 2, Feb. 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 4, No. 12, December 1955

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S/020/60/133/05/01/019
C111/C222

AUTHOR: Prokornyy, V.V.

TITLE: Two Analytic Methods in the Theory of Small Solutions of Nonlinear Integral Equations 16

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 5, pp. 1027-1030

TEXT: The methods of A.M.Lyapunov (Ref.1) and A.I.Nekrasov (Ref.3) can be applied for the investigation of ramifications of the solutions of nonlinear integral equations.- Incited by M.A.Krasnosel'skiy the author investigates both methods and states that the infinite algebraic system of equations which appears in the method of Nekrasov and which determines the behavior of the solutions of the considered nonlinear integral equation is equivalent to the ramification equation of Lyapunov-Schmidt. Furthermore it is shown: Developing the ramification equation of Lyapunov-Schmidt with respect to the bifurcation parameter and setting the coefficients of the development equal to zero, then one obtains the infinite system of Nekrasov. The author mentions N.N.Nazarov. There are 9 references: 7 Soviet and 2 German.

ASSOCIATION: Voronezhskiy gosudarstvennyy universitet (Voronezh State University)

PRESENTED: April 7, 1960, by A.N.Kolmogorov, Academician
SUBMITTED: November 28, 1959
Card 1/1

PROKORNY, J.; NOVAK, J.

The areodynamic conditions of the fuel bed while powered fuel is being burned. p. 45. PRAGUE. Ustav pro vyzkum a vyuziti paliv. PRACE. Praha. No. 6, 1954.

SOURCE. East European Accessions List, (EEAI), Library of Congress
Vol. 5, no. 12, December 1956.

PROKORENKO, K, K. and YEFEMOV, V. A.

"Speed of Pouring Steels" p. 115, Trudy Instituta Chernoy Metallurgii, Vol. 9, 1955.

PROKORENKO, K. K.

"Problems of Designing Ingot Molds and Ingot Mold Tops" p. 119, Trudy Instituta Chernoy Metallurgii, Vol. 9, 1955.

STARSHINOV, B.N.; SINITSKIY, V.D.; SEN'KO, G.Ye.; GULYGA, D.V.; BABIY, A.A.; KHORUZHIY, A.G.; Prinimali uchastiye: OSTROUKHOV, M.Ya.; SAVELOV, N.I.; PLISKANOVSKIY, S.T.; MOISEYEV, Yu.G.; LAVRENT'YEV, M.L.; TARASOV, F.P.; ZAGPEBA, A.V.; KAMENEV, R.D.; TKACHENKO, A.A.; FREYDIN, L.M.; LUKIN, P.G.; POPOV, Yu.A.; MISHIN, P.P.; KARACHENTSEV, M.D.; DOLMATOV, V.A.; AYUKOV, A.S.; PALAGUTA, V.P.; VYAZOVSKIY, Yu.V.; SOLODKIY, Yu.A.; KONAREVA, N.V.; SAPRONOV, Yu.V.; SINITSKAYA, S.K.; SAPRONOV, B.V.; LEKAREV, V.L.; STOLYAR, V.V.; PROKHORENKO, Z.A.; BANDINA, Ye.Ye.

Results of the first year of operation of large capacity blast furnaces. Sbor. trud. UNIIM no.11:34-46 '65.

(MIRA 18:11)

VORON'KO, Yu.K.; KAMINSKIY, A.A.; OSIKO, V.V.; PROKHOROV, A.M.

Selective excitation of the centers of rare-earth ions in crystals. Pis'. v red. Zhur. eksper. i teoret. fiz. 1 no.4: 33-39 My '65. (MIRA 18:11)

1. Fizicheskiy institut imeni Lebedeva AN SSSR i Institut kristallografii AN SSSR. Submitted April 16, 1965.

KAMINSKIY, A.A.; KORNIENKO, L.S.; PROKHOROV, A.M.

Spectral study of induced radiation from Nd^{3+} in CaF_2. Zhur. eksp. i teor. fiz. 48 no.2:476-482 F '65. (MIRA 18:11)

1. Institut yadernoy fiziki Moskovskogo gosudarstvennogo universiteta.

KONYUKHOV, V.K.; KOSTIN, V.V.; KULEVSKIY, L.A.; MURINA, T.M.; PROKHOROV, A.M.

A CaF_2-Dy^{2+} laser operating under conditions of repeated giant pulses with continuous pumping. Dokl. AN SSSR 165 no.5:1056-1058 D '65. (MIRA 19:1)

1. Fizicheskiy institut im. P.N.Lebedeva AN SSSR. 2. Chlen-korrespondent AN SSSR (for Prokhorov). Submitted September 2, 1965.

KARLOV, N.V.; PROKHOROV, A.M.

Regenerative traveling-wave quantum amplifiers. Radiotekh. i elektron. 11 no. 2:267-270 F '66 (MIRA 19:2)

1. Fizicheskiy institut imeni P.N. Lebedeva AN SSSR. Submitted November 24, 1964.

PROKOROV, A. M., and MANENKOV, A. A. (Moscow)

"Fine and Superfine Structure of the Paramagnetic Resonance in Bivalent Europium," a paper submitted at the International Conference on Physics of Magnetic Phenomena, Sverdlovsk, 23-31 May 56.

PROKOROV, S. YA.

Peat

Testing for moisture and increased residual content of peat when harvested by UKB-TUM m machines. Torf. prom. 29 no. 4, 1952.

Monthly List of Russian Accessions, Library of Congress, August, 1952. UNCLASSIFIED.

1. PROKOROVA YE.S., KAZMINA V.N. BUAMAN L.K.

2. USSR (600)

4. Sleep

7. Change in thiamine (vitamin B) requirements in long sleep therapy, Zhur. nerv. i psol,j 53 no.1, 1953.

9. *Monthly List of Russian Accessions*, Library of Congress, April 1953, unclass.

PROKOF'YEV, A. M. PA 75T94

USSR/Nuclear Physics - Counters, Electronic May 1948
Nuclear Physics - Ions

"High-Frequency Counter as an Indicator of Light Ions," A. M. Prokof'yev, Main Geophys Observatory, Leningrad, 2 pp

"Zhur Tekh Fiziki" Vol XVIII, No 5

Author described counter in previous article. Present paper shows that high-frequency sparks are caused by light air ions with a mobility of 0.47 cm^2/V per sec and above. Submitted to Zh.E.T.F. 29 Oct 1947. Submitted 24 Nov 1947.

FDB 75T94

PROKOSHEV, A. G.

Prokoshev, A. G.

"An analysis of existing and development of new laboratory methods for determining the basic physical-mechanical properties of viscose staple fiber." Min Higher Education USSR. Leningrad Textile Inst imeni S. M. Kirov. Leningrad, 1956. (Dissertation for the Degree of Candidate in Technical Sciences).

Knizhnaya letopis'
No. 21, 1956. Moscow.

PROKOSHEV, I. V.

Electric Transformers

Graphic determination of energy losses in transformers of 5 to 100 KVA, Rab, energ, 2, no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, May 1952 UNCLASSIFIED.

1. PROKOSHEV, N.V.

2. USSR (600)

4. Agriculture

7. Increasing the richness of ~~a~~ sandy and sandy loam soils of the peat-podzolic type. Moskva, Izd-vo. AN SSSR

9. Monthly List of Russian Accessions, Library of Congress, March, 1953.Unclassified.

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1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

Potash fertilizers on sandy loam soils. V. N. Prokoshky. *Udobrenie i Urozhai* (Fertilizers and Crops) 3, 432-43(1931).—On poor sandy and sandy loam soils in the Solikamsk exptl. plots complete fertilizers increased the yield of crops from 300 to 400%. An application of 60 kg. of each of N, P_2O_5 and K_2O gave just as good results as 60 tons of manure per hectare. The increase in yield which may be ascribed to the K_2O is equal to about 10%. With K alone no increase was obtained on oats in 1929 and in 1930. Barley did give some increase with K alone. The generally accepted idea that K alone is effective on hay crops did not materialize in the expts. conducted. On the soils tested clover responded very effectively to superphosphate, and addns. of K, in combination with P, had no effect. A distinct effect from K applications was noted on meadows. With root crops K when added to N and P gave large increases. With flax K alone had no effect on sandy loams, whereas when added in a complete fertilizer definite effects were noted. A comparison of the Solikamsk sylvite and carnalite with the German potash salts shows no differences. Lime had no effect as far as K effects are concerned. The rate of application varied from 60 kg. to 120. The latter is suited for root crops on sandy loams. For other crops a 60 kg. application was sufficient. The soil on which the tests were made was a podzolized soil.

J. S. Joffe

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Comparison of the effect of potassium fertilizers on grain
cultures. V. N. Prokoshev and E. M. Ustyuzhanina.
Mineral'nuie Udobreniya Insektofungisidui 1, No. 5,
59-69(1935).—Expts. in great variety were made with
sylvinite, carnallite (of various degrees of concn.), KCl
and mixts. of these. The results depended on the soil,
weather conditions and the type of plants and their rota-
tion. A. A. Boehtlingk

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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15

The comparative efficiencies of crude and enriched fertilizers. V. N. Prokoshev. *Kalii* (U. S. S. R.) 1936, No. 4, 35-9.—A description of the effect of the addn. of different K salts on the yields of potatoes, beets and turnips.

A. Pestoff

COMMON ELEMENTS

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OPEN

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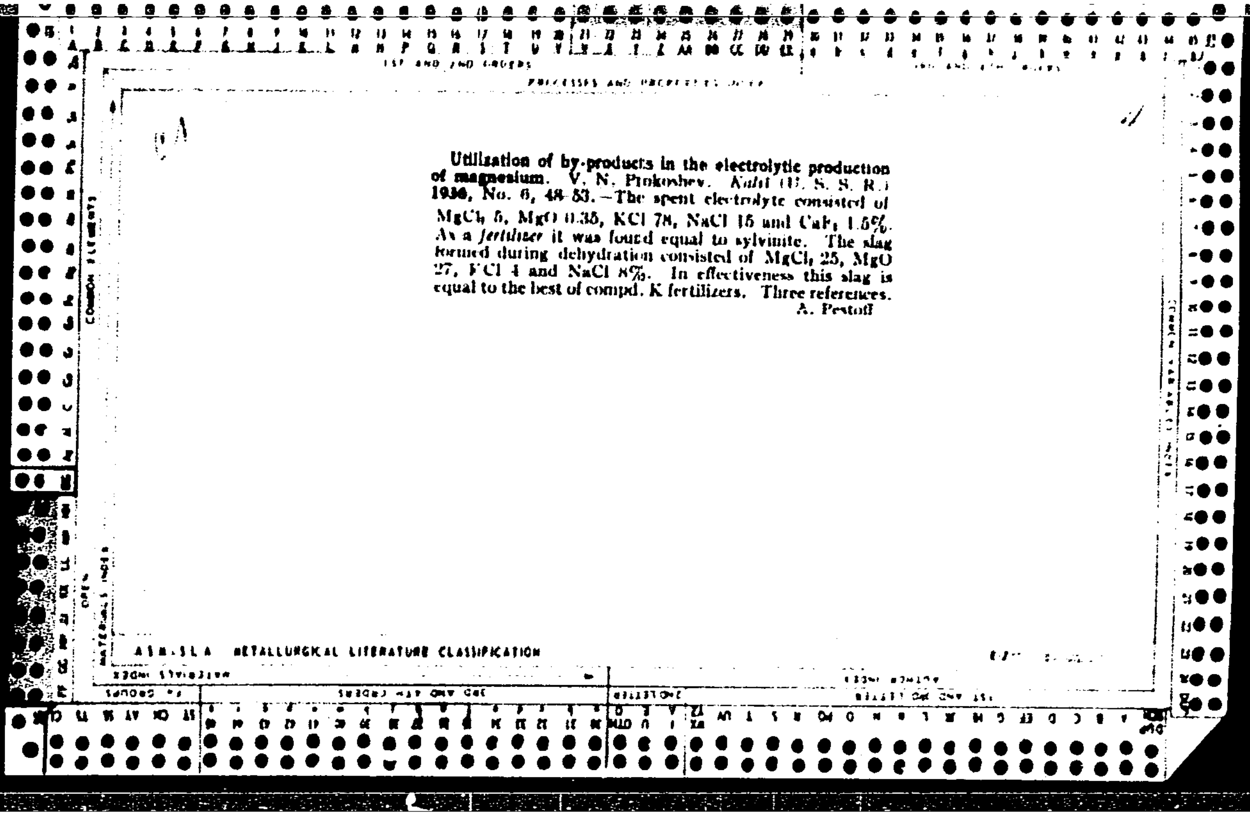
1ST AND 2ND LETTER



PROCESSES AND PROPERTIES INDEX

Utilization of by-products in the electrolytic production of magnesium. V. N. Prokoshev. *Kalii* (U. S. S. R.) **1936**, No. 6, 48–53.—The spent electrolyte consisted of $MgCl_2$ 6, MgO 0.35, KCl 78, NaCl 15 and CaF_2 1.5%. As a *fertilizer* it was found equal to sylvinite. The slag formed during dehydration consisted of $MgCl_2$ 25, MgO 27, KCl 4 and NaCl 8%. In effectiveness this slag is equal to the best of compd. K fertilizers. Three references.

A. Pestoff

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The importance of potassium sulfate as a fertilizer. V. N. Prokoshev, *Kalii* (U. S. S. R.) 1937, No. 4, 29-38.—The comparative effects of K_2SO_4 and KCl as fertilizers upon potatoes, clover, barley, oats, flax and beet were studied. K_2SO_4 had certain advantages over KCl.

A. Pestoff

COMMON ELEMENTS

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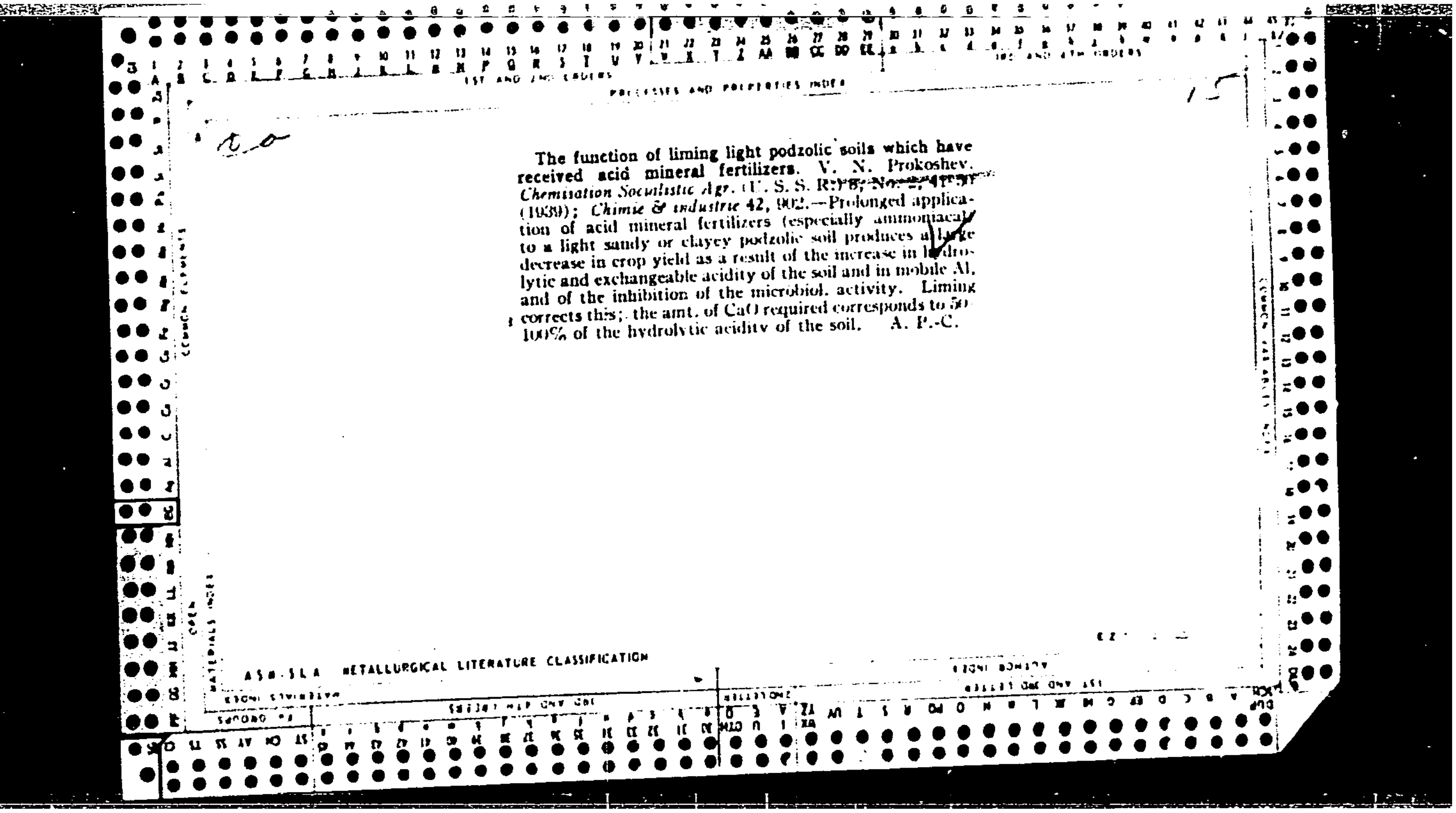

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ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

The function of liming light podzolic soils which have received acid mineral fertilizers. V. N. Prokoshev. *Chemisation Socialistic Agr.* (U. S. S. R.) ~~8, No. 2, 47-51~~ (1939); *Chimie & industrie* 42, 902.—Prolonged application of acid mineral fertilizers (especially ammoniacal) to a light sandy or clayey podzolic soil produces a large decrease in crop yield as a result of the increase in hydrolytic and exchangeable acidity of the soil and in mobile Al, and of the inhibition of the microbiol. activity. Liming corrects this; the amt. of CaO required corresponds to 50-100% of the hydrolytic acidity of the soil. A. P.-C.

CA

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15

Complementary application of nitrogen to winter cereals during the spring months. V. N. Prokoshev. *Chemisation Socialistic Agr.* (U. S. S. R.) ~~8, No. 4, 18-21 (1939)~~; *Chimie & industrie* 42, 901.—N fertilizers applied before sowing are less effective than the same amts. applied after sowing. Max. effort is obtained when N is applied late in the fall or early in the spring. A Papineau-Couture

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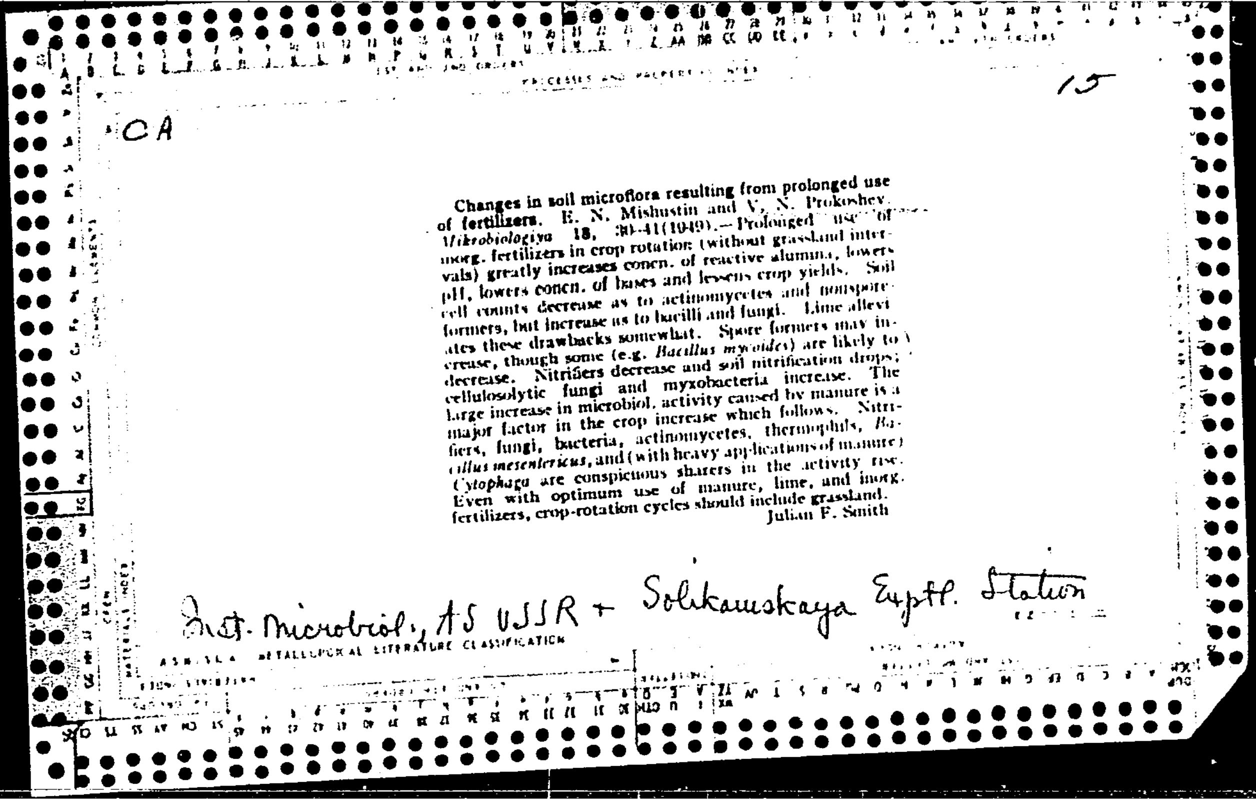
The comparative effect of various potassium fertilizers. V. N. Prokoshev and E. M. Ustyuzhanina. *Chemisation Socialistic Agr.* (U. S. S. R.) 1940, No. 1, 33-42; *Khim. Referat. Zhur.* 1940, No. 6, 55.—The different responses of agricultural plants to various K fertilizers are explained by their various requirements for the components of K fertilizers (Na, Mg, SO_4) and by the different responses to chlorides and to higher concns. of salts in the soil. Beets, turnips and grain crops respond favorably to K fertilizers contg. NaCl and sylvinite. A max. response to chlorides is shown by buckwheat, mustard, leguminous plants, lupine, clover and tech. potatoes; KCl and 40% K salt (but not sylvinite) can be added to the table varieties of potatoes; carrots and flax respond unfavorably to high concns. of raw and mixed K fertilizers. Clover, lupine and other crops respond favorably to K_2SO_4 if the soils are poor in sulfates. Cabbage and grain cultures are indifferent to K fertilizers. W. R. Henn

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROKOSHEV, V. N.

No. 37392--K voprosu o vvedenii travopol'nykh Sevooborotov na peschanykh i supe chanykh dernov~~y~~-podzolistykh pochvakh. Poch~~t~~voediye, 1949, No. 11, S. 652-58.
0 v en

So: Letopis' Zhurnel'nykh Statey, Vol. 7, 1949.



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Changes in soil microflora resulting from prolonged use of fertilizers. E. N. Mishustin and V. N. Prokoshev. *Mikrobiologiya* **18**, 30-41(1949).—Prolonged use of inorg. fertilizers in crop rotation (without grassland intervals) greatly increases concn. of reactive alumina, lowers pH, lowers concn. of bases and lessens crop yields. Soil cell counts decrease as to actinomycetes and nonspore formers, but increase as to bacilli and fungi. Lime alleviates these drawbacks somewhat. Spore formers may increase, though some (e.g. *Bacillus mycoides*) are likely to decrease. Nitrifiers decrease and soil nitrification drops; cellulosolytic fungi and myxobacteria increase. The large increase in microbiol. activity caused by manure is a major factor in the crop increase which follows. Nitrifiers, fungi, bacteria, actinomycetes, thermophils, *Bacillus mesentericus*, and (with heavy applications of manure) *Cytophaga* are conspicuous sharers in the activity rise. Even with optimum use of manure, lime, and inorg. fertilizers, crop-rotation cycles should include grassland.

Julian F. Smith

Inst. Microbiol., AS USSR + Solikamskaya Exptl. Station

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

PROKOSHEV, V. N. Doc Agricult Sci

Dissertation: "Increasing the Fertility of the Sand and Sandy-Loam Soils of Soddy-Podzolic Type." 7/6/50

Soil Inst imeni V. V. Dokuchayev, Acad Sci USSR

SO Vecheryaya Moskva
Sum 71

CA

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Effect of green manure on soil acidity. V. N. Prokoshev. *Trudy Pochvennogo Inst. im. V. V. Dokuchaeva* 33, 90-112(1950).—Plowing under the green manure in the fall was very effective in reducing soil-exchange acidity. The neutralizing effect of decompg. green manure is attributable to NH_3 liberated in the course of protein degradation. Thus, the effect of green manure increases with its protein content. High ash content contributes to the neutralization effect.

M. Hosch

PROKOSHEV, V. N

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Pvoysheniye Plodorodiya Peschanykh i Supeschanykh Pochv Dernovo-Podzolistogo Tipa (Increase of Fertility in Sand and Clay Soils of the Turf-Podzolic Type) Moscow, Akademkniga, 1952.

439 p. Diagrs., Map, Tables.

At head of title: Akademiya Nauk SSSR. Pochvennyy Institut.

"Literatura": p. 430-439.

PROKOSHEV, V. N.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Prokoshev, V. N.	"Increasing the Fertility of Sandy and Sandy Loam Soils of the Peaty Podzolic Type"	Molotov State Agricultural Institute imeni D. N. Pryanishnikov

SO: W-30604, 7 July 1954

COUNTRY : USSR
CATEGORY : Cultivated Plants. Cereals.

M

ABS. JOUR. : RZhBiol., No. 23 1958, No. 104654

AUTHOR : Prokoshev, V. N., Khalezov, N. A.
INST. : Molotov Agricultural Institute
TITLE : Some Problems of Agricultural Techniques in the Cultivation of Corn.

ORIG. PUB. : Tr. Molotovsk. s.-kh. in-t, 1957, 15, 13-29

ABSTRACT : The chief trend in the cultivation of corn in Western Ural (results of the experiments at Molotov Agricultural Institute and generalized conclusions from the wide production experience of kolkhozes) should should be toward its planting for sillage. Plantings for grain do not pay for themselves. The following mid-season and late maturing varieties are recommended for cultivation: Sterling, Osetinskaya belaya zubividnaya, Krasnodarskaya 1/40, Odesskaya 10 and the early maturing - Voronezhskaya 76,

Card: 1/2

COUNTRY :

CATEGORY : M

ABS. JOUR. : RZhBiol., No. 1958 No. 104654

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : Spasovskaya and others which can produce up to 30 centners/ha of ears. Indicated are: the best planting dates, planting rate, the feeding area, the seed planting depth, and other agrotechnical measures contributing to an increase in the yield of green roughage. --V. A. Vnuchkova

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PROKOSHEV, V. N., doktor sel'skokhozyaystvennykh nauk, prof.

"Fundamentals of agricultural chemistry" by A. S. Chernavin. Reviewed by V. N. Prokoshev. Khim. v shkole 17 no.4:93-95 Jl-Ag '62. (MIRA 15:10)

(Agricultural chemistry—Study and teaching)
(Chernavin, A. S.)

PROKOSHEV, V.N., red.

[Current advances in agricultural research and practical work] Nocoe v sel'skokhoziaistvennoi nauke i praktike. Perm', Permskoe knizhnoe izd-vo, 1959. 189 p. (MIRA 15:6)
(Perm Province--Agricultural research)

MASALKIN, Nikolay Konstantinovich; PROKOSHEV, V.N., red.

[Forty years of the Prianishnikov Agricultural Institute in Perm]
40 let Permskomu sel'skokhoziaistvennomu institutu imeni D.N.
Prianishnikova. Perm', Izd.sel'khoz.in-ta, 1958. 176 p.
(Perm--Agricultural colleges) (MIRA 12:2)

PROKOSHEV, V.N., redaktor

[redacted]

[New development in agricultural research and practice; a collection of articles] Novoe v sel'skokhoziaistvennoi nauke i praktike; sbornik statei. Molotov, Molotovskoe knizhnoe izd-vo, 1956. 262 p.
(Agriculture) (MIRA 10:11)

PROKOSHEV, V.Z.

Organic acids in leaves of the cotton plant. S. M. Prokoshev, V. Z. Baranova, and A. I. Mednikov (A. N. Bakh Inst. Biochem., Acad. Sci. U.S.S.R., Moscow). *Doklady Akad. Nauk S.S.S.R.* 102, 985-7(1955).—Leaves of *Gossypium hirsutum* contain slightly more malic acid than citric acid (9.9% and 8.5%); in *G. barbadense* 5 times as much malic acid as citric acid is found (6.9% and 1.3%). Numerous varieties of *G. hirsutum* studied in the Tashkent area have a high concn. of both acids with the content of both being nearly equal. No significant changes in these take place in the course of a day. Sulfate diffusion and pptn. as the Ca salt was used to isolate some citric acid from the leaves; the process is complicated by phys. factors of adequate maceration of the plant. A slight decline of both acids occurs if the leaves are sun dried instead of shade dried. G. M. Kosolapoff

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BUNDEL', A.A.; KRETOVICH, V.L.; PROKOSHEVA, G.A.

Distribution of hydroxylamine reductase in plants. Fiziol.rast. 12 no.6:971-979 N-D '65. (MIRA 18:12)

1. Institut biokhimii imeni A.N.Bakha AN SSSR, Moskva. Submitted October 24, 1964.

MIKHLIN, E.D.; PROKOSHEVA, G.A.

Composition of the biomass forming during methane fermentation of the distiller's waste. Prikl. biokhim. i mikrobiol. 1 no.1: 45-48 Ja-F '65. (MIRA 18:5)

1. Institut biokhimii imeni Bakha AN SSSR, Moskva.

L 10281-66 EWT(m)/EWA(d)/EWP(t)/EWP(z)/EWP(b) MJW/JD

ACC NR: AP5027709

SOURCE CODE: UR/0129/65/000/011/0031/0033

AUTHOR: Prokoshkin, D. A.; Vasil'yeva, A. G.; Akimov, V. V.

44,55 44,55 44,55

ORG: MVTU im. Bauman

44,55

TITLE: The strength and ductility of alloy steels subjected to low-temperature thermochemical treatment. 16,44,55

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 11, 1965, 31-33.

TOPIC TAGS: steel, alloy steel, structural steel, steel treatment, heat treatment, thermomechanical treatment, ansforming,* steel ansforming,* low temperature treatment, steel property/VL1 steel, VL1D steel, VKS1 steel, 40Kh SNVF steel

ABSTRACT: The effect of low-temperature thermomechanical treatment (LTTMT) on the mechanical properties of a series of medium- and high-alloy structural steels has been investigated. Six complex-alloyed steels, VL-1, VL1D, VKS1, 40KhGSNMF, 40KhSNVF, and 40Kh5NSMF, containing 0.3—0.46% C, 1.4—5.2% Cr, 0.81—2.26% Ni, 0—1.5% Mo, 0.55—1.38% Mn, 0.86—1.32% Si, 0—0.8% V, and 0—1.2% W, were austenitized at 900—1030C, cooled to 550—500C, rolled in one, two, and five or ten passes with respective reductions of 20, 40, and over 85% (with reheatings in 5 and 10 pass rolling), oil quenched, and tempered at 200, 250, or 260C. It was found that LTTMT significantly reduced the block size in all the investigated steels. After the LTTMT, the tensile strength of all steels was 60—80 kg/mm^2 higher than that of conventionally heat-treated steels: from 179 to 225 kg/mm^2 for

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UDC: 620.178:3:669.15-194:66.046

* Should be austforming

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ACC NR: AP5027709

VL1 steel and from 200 to 276 kg/mm^2 for 40KhSNVF steel. The increases in the yield strength and elongation ranged from 4 to 69 kg/mm^2 and from 0.5 to 2.2%, respectively. The most significant increase in the tensile strength occured at low and very high reductions. The elongation increased with increasing reductions up to 60% and decreased with higher reductions. Tempering at temperatures up to 550C does not annihilate the beneficial effect of LTTMT. In all steels after the LTTMT, the ductility was lower (by about 3%) and the resistance to plastic deformation was higher (by 8—13 kg/mm^2) in the direction transverse to that of rolling. Orig. art. has: 4 figures and 4 tables. [MS]

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 001/ ATD PRESS: 4166

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L 12768-66 EWT(m)/EWP(v)/T/EWP(t)/EWP(k)/EWP(b)/EWA(h)/EWA(c) IJP(c) JD/HM

ACC NR: AP6002585 SOURCE CODE: UR/0286/65/000/023/0080/0080

INVENTOR: Lazarev, A. N.; Prokoshkin, D. A.; Il'in, L. S.; Shlykov, O. P.; Tarayeva, M. I.; Novoselov, A. S.; Barashkov, M. A.

ORG: none

TITLE: Brazing alloy for soldering.16 Class 49, No. 176784 16

43

B

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 23, 1965, 80

TOPIC TAGS: brazing, titanium, titanium brazing

27

ABSTRACT: This Author Certificate introduces a copper-base brazing alloy for titanium. To lower the melting temperature of the alloy and to increase the strength of joints, the alloy contains 2—4% aluminum, 4—6% tin, 24—26% titanium, and the rest copper. [ND]

SUB CODE: 13,/11/ SUBM DATE: 12May64/ ATD PRESS: 4184

Card 1/1 HW UDC: 621.791.36:669.295

L 02991-67 EWT(m)/EWP(t)/ETI IJP(c) MJW/JD/JG

ACC NR: AP6033155 SOURCE CODE: UR/0105/66/000/010/0082/0083 17
B

AUTHOR: Gorina, N. B.; Gruznov, Yu. A.; Kolobanov, V. V.; Matorin, V. I.; Prokoshin, A. F.; Rad'kov, A. I.; Sokolov, V. I.; Tret'yakov, B. N.; Fedotov, L. N.; Khromov, S. M.; Kuleshov, V. F.

ORG: Central Scientific Research Institute of Ferrous Metallurgy im. I. P. Bardin (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii)

TITLE: The 65BT superconducting alloy

SOURCE: Elektrichestvo, no. 10, 1966, 82-83

TOPIC TAGS: superconducting alloy, superconductivity

ABSTRACT: A new, relatively low cost Nb-Ti based alloy, designated 65BT, which meets all the major requirements for superconductors has been developed. Because of its properties it can be used in 1) magnetizing devices, such as superconducting solenoids, for field strengths varying from 20 to 80 koe, and 2) wires 0.1—0.3 mm in diameter and up to 12,000 m long and tapes 5 μ thick. The alloy, which contains 65% niobium, 25% titanium, and several other components, is produced in

Card 1/2 UDC: 537.312.62

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ACC NR: AP6033155

an arc furnace and, after thermal processing, is cold drawn. For use in superconducting solenoids, the alloy requires a 0.02—0.05-mm copper coating. Orig. art. has: 1 table.

SUB CODE: 20/ SUBM DATE: none/ ATD PRESS: 5099

awm

Card 2/2

PROKOSHIN, V.I.

Changes in the electric resistance of bismuth of various degrees of purity under the effect of plastic deformation and annealing. Fiz.-met. i metalloved. 20 no.5:697-701 N '65. (MIRA 18:12)

1. Belorusskiy gosudarstvennyy universitet imeni V.I. Lenina. Submitted September 25, 1964.

L 11887-66 EWT(m) DIAAP

ACC NR: AP5028021 SOURCE CODE: UR/0386/65/002/008/0387/0391

AUTHOR: Kut'in, V. M.; Petrukhin, V. I.; Prokoshkin, Yu. D.

ORG: Joint Institute of Nuclear Research (Ob"yedinennyy institut yadernykh issledovaniy)

19,55

TITLE: Search for $\pi^0 \rightarrow 3\gamma$ decay [Reported at the June Session of the Nuclear Physics Division, Academy of Sciences, SSSR]

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 2, no. 8, 1965, 387-391

TOPIC TAGS: pion, parity principle, strong nuclear interaction, gamma quantum

ABSTRACT: The authors investigated the decay of a neutral pion into three γ quanta ($\pi^0 \rightarrow 3\gamma$), interest in which has recently increased in connection with the observed $2K_2^0 \rightarrow 2\pi$ decay, which violates CP invariance. To register this decay, they used the apparatus previously employed in a study of the rare processes of pion decay and capture (ZhETF v. 47, 84, 1964; Nuovo Cimento v. 28, 99, 1963). The experiments were performed with the OIYaI synchrocyclotron. The π^- mesons with initial energy 70 Mev passed through a series of scintillation counters and decelerating filters and were stopped in a liquid-nitrogen target, where the charge exchange $\pi^- + p \rightarrow \pi^0 + n$ took place. The γ quanta produced in the decay were registered with three Cerenkov total-absorption spectrometers placed around the target and connected in a nonasecond coincidence circuit. Scintillation counters, connected for anticoincidence and preventing registration of charged particles from the target by the spectrometers,

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ACC NR: AP5028021

were placed between the target and the spectrometers. The pulses from all the counters and spectrometers were photographed on the screen of a 5-beam high-speed oscilloscope, making possible multidimensional time and pulse-height analysis of the registered events. The results yielded an estimate of 2.2×10^{-6} at the 1/e confidence level for the upper limit of the branching ratio of the decay of a neutral pion into three γ quanta. At the 90% confidence level, the limit is $< 5 \times 10^{-6}$. If it is assumed that a second neutral meson, having the same mass as the π^0 meson, exists but is capable, unlike the other, of decaying into three γ quanta, then the data yield the following maximum estimates for the relative probability of production and decay of such a meson: 6×10^{-6} at an average lifetime $\tau_{3\gamma} < 10^{-10}$ sec, 1.3×10^{-5} ($\tau_{3\gamma} < 5 \times 10^{-10}$ sec), 2×10^{-5} ($\tau_{3\gamma} < 10^{-9}$ sec), and 1.5×10^{-4} ($\tau_{3\gamma} < 10^{-7}$ sec). Authors thank L. I. Lapidus, L. B. Okun', I. Ya. Pomeranchuk, and B. Pontecorvo for useful discussions. Orig. art. has: 2 formulas and 2 tables.

SUB CODE: 20/ SUBM DATE: 01Sep65/ ORIG REF: 004/ OTH REF: 004

HW

Card 2/2

SHAPIRO, I.P. [Shapira, I...]; KUZNETSOV, N.I. [Kuznietsou, N.I.];
PROKOSHINA, N.A. [Prakoshyna, N.A.]

Luminescence of the ZnS·Cu – Mn electroluminophor. Vestsi AN BSSR.
Ser. fiz.-tekh. nav. no.4:5[illegible]-55 '63.
(MIRA 17:12)